REMARKS

Claims 1-25 are currently pending in this application. Applicants respectfully request reconsideration and allowance of the present application.

In the Office Action mailed April 15, 2008, the Examiner rejected claims 1, 2, 6-9, 11 and 12 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0118902 to Schubert et al. ("Schubert"). Applicants respectfully disagree that Schubert anticipates claims 1, 2, 6-9, 11 and 12, and respectfully traverse the rejection for the reasons set forth below.

In order to anticipate a claim, each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987); M.P.E.P. § 2131. Claims 1, 2, 6-9, 11 and 12 all require a first thermoplastic seal member comprising a thermoplastic resin and more than 10 weight percent of a thermal-stabilizing filler. Based on Applicants' review of Schubert, it appears that the only disclosure relating to fillers is in the Background of the Invention, which states:

> To reduce the rate of stress relaxation, fillers such as talc, calcium carbonate, carbon black, silica, and the like have been added to the seal member material. However, even when this is done, the stress relaxation rate *may still be higher than desirable*. Mineral fillers also tend to be *distributed non-uniformly after molding, which can lead to non-uniform seal member properties, defects and cell sealing deficiencies*.

(Schubert at ¶ [0006] (emphasis added)). First, although fillers are mentioned in the "Background of the Invention" in Schubert, there is not a disclosure that the fillers are used in the Schubert electrochemical cell, much less in any electrochemical cell. The above cited portion relating to fillers is a general discussion, without specifically stating in what type of application the fillers and seal member materials were used.[1]

[1] Applicants also note that the disclosure relating to fillers teaches away from utilizing fillers since they can lead to non-uniform seal member properties, defects and cell sealing deficiencies. (Schubert at [0006]).

Second, the above cited portion of Schubert does not mention the amount of the filler that was used, much less a disclosure that the filler comprises more than 10 weight percent. Accordingly, Applicants respectfully submit that Schubert does not anticipate claims 1, 1, 2, 6-9, 11 and 12 for the foregoing reasons.

The Examiner also rejected claims 1-15, 18, 20-22 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 4,592,970 to Zupancic ("Zupancic") in view of U.S. Patent No. 6,468,691 to Malay et al. ("Malay") in further view of U.S. Patent No. 4,580,790 to Doose ("Doose"). The Examiner also rejected claims 16, 17 and 23 under 35 U.S.C. § 103(a) as unpatentable over Zupancic in view of Malay, in further view of Doose and in further view of U.S. Patent No. 4,482,613 to Turchan et al. ("Turchan"). The Examiner also rejected claims 19, 24 and 25 under 35 U.S.C. § 103(a) as unpatentable over Zupancic in view of Malay, in further view of Doose, and in further view of U.S. Patent No. 5,183,594 to Yoshinaka ("Yoshinaka"). Applicants likewise traverse these rejections for the following reasons.

The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. M.P.E.P. § 2142. The combination of prior art references must have been "obvious to a person with ordinary skill in the art." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007). To establish a case of *prima facie* obviousness, there must be some apparent reason why a person of ordinary skill in the art would combine the references, and the analysis should be made explicit. *Id.* at 1741; M.P.E.P. § 2142. Further, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka,* 490 F.2d 981 (C.C.P.A. 1974). If the prior art does not teach or suggest all of the claim limitations, the Examiner must explain why the differences between the prior art and the claimed invention would have been obvious to one having ordinary skill in the art. M.P.E.P. § 2143.

All of the Examiner's obviousness-based rejections are primarily based on a combination of Zupancic, Malay and Doose. In the Examiner's opinion, one of ordinary skill in the art would have combined the electrochemical cell taught in Zupancic with the seal

comprising polytetrafluoroethylene (PTFE) and 15-25% E-glass filler disclosed in Doose, for the problem disclosed in Malay.

Applicants respectfully assert that it would not have been obvious to one of ordinary skill in the art to combine the teachings of Zupancic, Doose and Malay to arrive at the claimed invention. The Examiner recognizes that Zupancic and Malay, the references which specifically address electrochemical cells, do not disclose a thermal-stabilizing filler material of more than 10 weight percent. The only reference that the Examiner cites for teaching the "more than 10 weight percent thermal-stabilizing filler" limitation is Doose, which relates to reciprocating and/or rotating surfaces, particularly for rotating shafts and rider rings for use in sealing reciprocating pistons such as those commonly found in pumps, compressors, and as bearing pads used to support bridges and high rise buildings. (Doose, col. 1 ll. 14-29). Based on Applicants' review of Doose, Applicants are unable to find any reference indicating or even suggesting that the teachings of Doose would be applicable to an electrochemical cell.

Moreover, Applicants assert that one of ordinary skill in the art would not have combined Zupancic with Doose for an additional reason. Each of the claims requires that the seal member provide a pressure relief from the cell to allow it to vent. Zupancic teaches that the liner and seal member are "*resiliently deformable* such that said member is adapted to be at least partially expelled from the vent orifice upon a predetermined internal gas pressure buildup within the cell to provide a permanent vent for the cell." (Zupancic, col. 3 ll. 28-35 (emphasis added)). In contrast, Doose teaches that the purpose of incorporating filler in the PTFE is to "*prevent the PTFE from becoming deformed* during continued use." (Doose, col. 1 ll. 37-39 (emphasis added)). The prevention of deformation is contrary to venting which essentially involves deformation of the seal. Accordingly, Applicants submit that one of ordinary skill in the art would not have combined the Doose seal, which prevents the PTFE from deforming, with the Zupancic cell, which needs to deform the seal to vent, to arrive at the claimed invention.

Moreover, Applicants assert that claims 5 and 21 are allowable for an additional reason presented below. The Examiner rejected claims 5 and 21 as obvious based on the combination

of Zupancic, Doose and Malay. The Examiner stated that Doose discloses seals comprising PFTE and 15-25% E-glass filler. (4/15/08 Office Action, p. 6). However, Applicants respectfully assert that Doose teaches away from utilizing E-Glass since it states:

> When PTFE seals utilizing E-Glass as the filler material are used as a seal or support between metal parts or other materials having a similar or lower hardness than the E-Glass, *considerable wear debris is generated during movement of the parts. This is an especially critical problem in expensive compressor and pump equipment where the generation of wear debris between the E-Glass reinforced PTFE and metal parts results in premature failure of the equipment requiring tear-down, inspection and rebuilding of the apparatus*.
>
> *It would be desirable to provide a PTFE material having a suitable alternative filler material* which provides adequate structural strength to the PTFE and resistance to cold creep, while at the same time limiting the amount of wear debris generated between the PTFE and the surfaces which rub against the PTFE during operation of the equipment.

(Doose, col. 1 ll. 50-65 (emphasis added)). Applicants submit that, based on the above disclosure of Doose, one having ordinary skill in the art would have been discouraged from incorporating E-glass as a filler to arrive at the claimed invention. Accordingly, Applicants assert that claims 5 and 21 are allowable for this additional reason.

In view of the above remarks, it is submitted that claims 1-25 define patentable subject matter and are in condition for allowance, which action is respectfully solicited. If the Examiner has any questions regarding the patentability of any of the claims, the Examiner is encouraged to contact Applicants' undersigned attorney at the Examiner's convenience.

Respectfully submitted,

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Date

/Kevin T. Grzelak/
Kevin T. Grzelak, Registration No. 35,169
Price, Heneveld, Cooper, DeWitt & Litton, LLP
695 Kenmoor, S.E.
Post Office Box 2567
Grand Rapids, Michigan 49501
(616) 949-9610

KTG/AZW